

## Faculty of Engineering, Computing and Mathematics

## UWA Grants

[UWA Research Development Awards](#)
[UWA Research Collaboration Awards](#)
[UWA Bilateral Research Collaboration Awards](#)
FURTHER  
INFORMATION

## SEARCH FOR:

[Research Expertise](#)
[Research Staff Profiles](#)
[Research Publications](#)
[Theses](#)
[Facilities](#)

1

## UWA Research Development Awards

RESEARCHER(S)	PROJECT TITLE	GRANT RECEIVED
Dr CW Baek, School of Environmental Systems Engineering	An Investigation of the Influence of Antecedent Soil Moisture Condition on the Rainfall-Runoff threshold Value of a Roaded Catchment	\$14,545.85 (2012)
Dr Q Guo, School of Electrical, Electronic & Computer Engineering	Implementing a Reconfigurable Underwater Acoustic Communication Modem	\$27,985 (2012)
A/Prof NL Jones, School of Environmental Systems Engineering	The Influence of Nonlinear Internal Waves on Mixing and Transport in the Ocean	
Mr SM Kelly, School of Environmental Systems Engineering	Internal Tides in the Tomor Sea and Bonaparte Basin	\$29,414.00 (2012)
Dr I Shufrin, School of Civil & Resource Engineering	Nonlinear Mechanics of Fragmented Structures: Stability of Beams and Plates	\$14,545.85 (2012)
A/Prof S Su, School of Mathematics & Statistics	A Novel, Univied Approach to Portfolio Optimisation in Finance	\$10,334.80 (2012)
Dr M Thums, School of Environmental Systems Engineering	Context and Drivers of Movement of Indian Ocean Whale Sharks	\$25,500 (2012)
Dr Y Tian, Centre for Offshore Foundations Systems	Developing a Numerical Pipe-Soil Model from Centrifuge Tests that describes the large Displacement Behaviour of Offshore Pipelines Shallowly Embedded in Sands including the Berm Effect	\$19,166.65 (2012)
Dr G Watson, School of Mechanical & Chemical Engineering	High Pressure Dynamic Absorption Measurement System to Study Metal Organic Frameworks for Gas Separation	\$25,415 (2012)
Dr G Zhang, School of Mechanical & Chemical Engineering	Soft Tissue Simulation: Material Model and Numerical Implementation using Smoothed Finite Element Method	\$18,052.30 (2012)
A/Prof John Boxall, School of Mechanical & Chemical Engineering	Preventing the Formation of Natural Gas Hydrate Blockages in Under-Inhibited Conditions	\$29,902.00 (2011)
A/Prof Brendan F Graham, School of Mechanical & Chemical Engineering	The Capture and Removal of Carbon Dioxide in High Pressure Natural Gas Streams by Calixarene Based Absorbents	\$28,600 (2011)
Mr Ivan Haigh, School of Environmental Systems Engineering	Storm surge propagation and coastal flooding in the Peel Harvey Estuary	\$25,940 (2011)
A/Prof Christine E Hanson, School of Environmental Systems Engineering	Dense Shelf Water Cascades off Southwestern Australia: their Impact on Phytoplankton Nutrient Dynamics and Community Composition	\$29,770 (2011)
Dr Brendan Kennedy, School of Electrical, Electronic, & Computer Engineering	Breast Tumour Margin Identification Using Viscoelastic Properties of Tissue	\$25,940 (2011)
A/Prof Dirk Lorenser, School of Electrical, Electronic, & Computer Engineering	Better Assessment of Muscular Dystrophy using Ultra-Fine Fiber-Optic Needle Probes	\$26,350 (2011)
Dr Rajesh Sreedharanpillai, School of Electrical, Electronic, & Computer Engineering	Stimulated Emission Depletion Microscopy using Needle-sized imaging Probes	\$25,000 (2011)
Dr Wilson YS Wong, School of Computer Science & Software Engineering	Extracting Clinical Concepts and their Temporal Information for Interpreting Noisy Clinical Progress Notes	\$23,938 (2011)
A/Prof Laichang Zhang, School of Mechanical & Chemical Engineering	Low-stiffness and high-strength beta titanium nanocomposites for load-bearing implant applications	\$29,530 (2011)

## UWA Research Collaboration Awards

RESEARCHER(S)	PROJECT TITLE	COLLABORATING ORGANISATION(S)	GRANT RECEIVED
Bennamoun, Mohammed - School of Computer Science & Software Engineering	Hyper-Spectral Imaging for Early Detection of Human Skin Precancerous Lesions	Australian National University	\$12,000
Bienen, Britta - Centre for Offshore Foundation Systems	Unlocking the Mechanisms Governing Foundation Penetration into Carbonate Sand	Hamburg University of Technology	\$10,000
Joldes, Grand - School of Mechanical and Chemical Engineering	From Medical Images to Computational Models in Neurosurgery	Harvard University	\$18,950
Liu, Jishan - School of Mechanical & Chemical Engineering	Development of a Novel Experimental Approach for the Evolution of Coal and Shale Permeability	Pennsylvania State University	\$10,000
Pattiaratchi, Charitha - School for Environmental Systems Engineering	Long-term Changes in Perched Beach Morphology and Response to Climate Change in Australia and the UK	University of Southampton	\$12,000
Pattiaratchi, Charitha - School of Environmental Systems Engineering	New Insights into Blue Whales, the Sri Lankan Enigma: Linking Oceanography, Prey, and Blue Whale Distribution in an Ecological Cul-de-sac	Duke University	\$15,000
Rufford, Thomas - School of Mechanical & Chemical Engineering	Natural Gas Processing and Utilisation Collaborations with University of Auckland, CSIRO, Tsinghua and the Chinese Academy of Sciences	Chinese Academy of Sciences	\$15,000
Sercombe, Tim - School of Mechanical & Chemical Engineering	Fatigue Properties of a Biomedical Beta Titanium Component Manufactured Using Selective Laser Melting	Chinese Academy of Science	\$14,000
Waite, Anya - School of Environmental Systems Engineering	Building an International Research Collaboration on Nitrogen Fixation in the Indian Ocean	University of Southampton	\$12,000
Dr Richard van der Wath - School of Computer Science and Software Engineering	Bayesian Analysis of DNA Samples in Gene Doping Detection	University of Cambridge	\$11,000
W/Prof Karol Miller, School of Mechanical and Chemical Engineering	Biomechanical Modelling of Brain Diseases	ETH Zurich	\$10,000
W/Prof Caroline Baillie - School of Environmental and Systems Engineering	International Engineering Thresholds	University of Oxford, Durham University, University College of London, University of Birmingham	\$15,000

## UWA Bilateral Research Collaboration Awards

RESEARCHER(S)	PROJECT TITLE
Asst/Prof Thomas Rufford, Centre for Energy, Dr Greg Birkett, University of Queensland	Gas Workshop and Related Activities to Develop a National Centre of Excellence in Gas Processing and Utilisation (\$15 000)
Prof Mariusz Martyniuk, School of Electrical, Electronic and Computer Engineering, Prof Han Huang, University of Queensland	SiGeC as structural material for micro-electromechanical systems (\$12 000)
Dr Longbin Huang, University of Queensland, Ass/Prof Hong Yang, School of Mechanical and Chemical Engineering	Engineering Biochars for Restoring and Sustaining Soil-plant Systems - From Mined Land to Crop Fields (\$16 600)
W/Prof Dongke Zhang, Centre for Energy, Prof John Zhu, University of Queensland	Joint Effort in Developing a National Centre of Excellence in Gas Processing and Utilisation
Dr Vivien Challis, University of Queensland, Prof Tim Sercombe, School of Mechanical and Chemical Engineering	Manufacturing high strength-to-weight materials via topology optimization and solid freeform fabrication

[Back to top](#)